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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/105,840
Filing Date: June 26, 1998
Appellant(s): David Bill

W. Karl Renner

For Appellant

MAILED

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GROUP 2600

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed March 07, 2005.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is as follows:

This appeal involves claim 1-3, 6-9, 12-15 and 18-92.

Claims 1-3, 6-9, 12-15 and 18-92 are rejected.

Claims 29, 32, 35, 40, 50, 58, 71, 92 are objected for the informalities.

Claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 70, 72, 77, 79, 84, 86, 91 are rejected under 35 U.S.C. 112.

(4) Status of Amendments After Final

Amendment after final filed 07/03/2003 has not entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

A. Whether the features upon which appellant relies are recited in the rejected claims. Although the claims are interpreted in light of the specification. Limitations from the specification are not read into the claims. *In re Van Guens*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

B. Whether the subject matter of claims 1-3, 6-9, 12-15 and 18-78 would have been obvious to a person of ordinary skill in the art under the provisions of 35 USC 103(a) at the time the subject matter of those claims was made, based on the teachings of Chaddha (US#6,345,293) and Reed et al. (US#6,041,239).

C. Whether the subject matter of claims 72-92 would have been obvious to a person of ordinary skill in the art under the provisions of 35 USC 103(a) at the time the

subject matter of those claims was made, based on the teachings of Chaddha (US#6,345,293), Reed et al. (US#6,041,239) and Logan et al. (US#5,721,827).

(7) Grouping of Claims

Appellant's brief includes a statement for grouping of claims and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

6,345,293	Chaddha	Jul. 03, 1997
6,041,239	Reed et al.	Jul. 18, 1997
5,721,827	Logan et al.	Oct. 02, 1996

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 1-3, 6-9, 12-15, 18-71 are rejected under 35 U.S.C. 103(a) as being patentable over Chaddha (US#6,345,293) in view of Reed et al. (US#6,041,239).

In so far as it is understood, with respect to claims 24-32, 35-53, Chaddha (US#6,345,293) and Reed et al. (US#6,041,239) disclose a distributed information system for facilitating communications between a network distribution device and a large number of recipients, according to the essential features of the claims. Chaddha

(US#6,345,293) discloses a distribution of customized multimedia content over a network, enabling personalized multimedia content targeted at specific end users. Chaddha teaches techniques for efficiently distributing marketing information over a computer network to consumers with diverse interest, while efficiently utilizing the network resources thereby providing consumers with information that is of interest to the individual consumer in a cost effective manner (*choosing whether to distribute the content element to the individual recipient based on individual's interest*). Fig. 5 illustrated a cost effective bandwidth selection for transmitting scalable multimedia content to the end user, which corresponds to the likelihood of patronage (*responsive to a predict interest by an individual recipient - step 530*). The end user factors (*including regularity of patronage at the business, customer's income history, credit worthiness, age, hobbies, occupation and marital status - step 520*) are used to select an appropriate transmission bandwidth (step 540). Such an arrangement is advantageous because the personalized content (*predicted interest by an individual recipient*) is targeted at end user who has a higher probability of interest in the personalized content based on the personal profile (Col. 7, lines 10 plus and the abstract; Figs. 2-4). The Applicant's attention is directed to the customizable information distribution (CID) system as shown in Fig. 2, in which Global server 210 and local servers 221, 222, . . . 229 are coupled to client computers 241a, 241b, . . . 241z, 242a, 242b, . . . 242z, . . . 249a, 249b, . . . 249z, via a computer network 290, e.g., the internet. In addition, global server 210 is coupled to a global database 215, while local servers 221, 222, . . . 229 are coupled to local databases 251, 252, . . . 259, respectively. Note that the disclosed hardware environment is exemplary. For example, global database 215 may be coupled

to global server 210 via network 290. Similarly, local servers 221, 222, . . . 229 may be coupled, via network 290, to local databases 251, 252, . . . 259, respectively. In this embodiment, global server 210 is a stream server and provides video stream(s) and optional global annotation stream(s) to one or more of client computers 241a, 241b, . . . 241z, 242a, 242b, . . . 242z, . . . 249a, 249b, . . . 249z, on demand. Information in a viewer profile (*local databases*) is used to obtain an estimated measure ("score") of the viewer's predicted interest (*collaborative filtering*) in currently available program so as to be able to rank the available programs in order of predicted viewer interest. Any of a large variety of well known analytical techniques can be used.

Furthermore, Reed et al. (US#6,041,239) discloses a method and system for calculating and distributing an offered load over a wireless communications systems service area, in which the user-selectable input parameters are used to estimate the load offered by each region in the service area and distribute this load appropriately throughout the service area (*choosing whether to distribute the content element to the individual recipient based on the "score"*). Reed further teaches the step of determining the offered load in Erlangs (one Erlang is equal to one full hour of phone use or conversation per hour of clock-time or 1 call minute per minute) for that sub-region (*determining the score to the content element*). These offered loads are then used to assign base station transceivers within each sub-region (*the score is used for distributing an offered load over a wireless communications systems service area*) (Col. 1, lines 35 plus). Reed further teaches a method and system for calculating and distributing an offered load over a wireless communications system service area for the purpose of facilitating base station layout in the service area. Fig. 6 depicted a logic

flowchart that illustrates the method of calculating and locating an offered load according to the method and system of the present invention, in which a road density factor for each tile in the service area (*score for the content element in a pool*) is calculated using the transportation database, as illustrated at block 208. The load that will be offered to a wireless communication system over a defined service area is predicted using a set of demographic and transportation route databases, along with a user selectable set of input parameters, some of which may be referred to as market factors or road density factors. These databases may be commercially available or assembled by the users. The user selectable input parameters are used to estimate the load offered by each region in the service area and distribute this load appropriately throughout the service area (*the process of choosing whether to distribute the content element to the individual recipient based on individual's predicted interest*). The output, which may be in the form of a map depicting the offered load, differs from offered load predictions obtained using prior art methods in that significant percentages of the offered load may be selected regions and placed on the transportation arteries or in other regions in order to model movement of the users between their residential neighborhoods and places of work or leisure. Additionally, the input parameters may be a function of time, which means that different maps may be obtained for various times of day. For example, during weekday morning rush hours, larger amounts of the offered load may be placed on the transportation arteries compared to the load placed on the transportation arteries during the hours of 9 11 a.m (See Fig. 6; Col. 2, lines 33 plus and Col. 8, lines 35 plus).

Regarding claims 1-3, 6-9, 12-15, 18-23, 33 and 34, they are method claims corresponding to the apparatus claims above.

Regarding claims 54-71, the claims recited a computer program product for performing the same basis of steps and apparatus of the prior arts as discussed in the rejection of apparatus claims above.

B. Claims 72-92 are rejected under 35 U.S.C. 103(a) as being patentable over Chaddha (US#6,345,293) in view of Reed et al. (US#6,041,239) and further in view of Logan et al. (US#5,721,827).

In so far as it is understood, with respect to claims 79-85, Chaddha (US#6,345,293) and Reed et al. (US#6,041,239) disclose the claimed limitations discussed in section **A** above. In the same field of endeavor, Logan et al. (US#5,721,827) disclose a system for selectively distributing personalized information and entertainment programming to subscribers. In a principle aspect, the present invention take the form of a personalized information delivery system which provides information and entertainment programming to individual subscribers from a library consisting of a large number of diverse programs, and which incorporates mechanisms for selectively delivering a subset of those programs to a given subscriber based on that subscriber's characteristics, subject matter preferences and interests, and express requests. As contemplated by the invention, the library of programs is created and maintained by a server subsystem to which a remotely located subscriber/player subsystem can connect by means of a conventional data transmission link, such as a dial up Internet connection. The programs making up the library are subdivided into

program segments (*plurality of content elements*), one of which contains an audio presentation of the content of the program and, if that content includes a voice narrative, it is preferably accompanied by a text file transcript. Each program segment is associated with a subject category description (*determining a score for more than one of several different content elements in a pool of content elements*) which typically describes a plurality of related program segments, and a program topic description describes the content of each individual program segment. Combinations of these category and program descriptions which are of interest to a particular subscriber are transferred from the server subsystem to that subscriber's player subsystem, thereby providing a subject matter catalog (*selecting one of the plurality of content elements in response to the scores*) from which the subscriber may expressly request particular programs (Fig. 6 and Col. 1, lines 39 plus). Logan teaches in Fig. 6 a flow chart which describes a preferred procedure for preparing the program content which is distributed to subscribers in accordance with the invention to facilitate interactive program selection. The first step in program production is to build a structured database of 'articles' which are candidates for inclusion in individual subscriber compilations. The authoring system seen in Fig. 6 scans a wide range of data sources 401 for potential content as indicated at 403. Examples of data sources might be news service wire feeds or newsgroups on the Internet. The authoring system subdivides the accessed program data into program segments (topics) and indexes each segment by subject area at 405. In the case of text data, this indexing may be done automatically by parsing the text into words and building a conventional inverted file word index to the program segments. In the case of audio programming, a text transcript may be prepared using

conventional speech recognition mechanisms to for a transcript, and the transcript may then be indexed by the terms used. Alternatively, human indexers may produce descriptive words and phrases to characterize the content of a program segment, and these descriptors may be used to index those segments (*determining a "score" for more than one of several different content elements in a pool*). After the indexing has been performed at 405, the authoring system then compares the each program segment's index data at 407 with system wide selection criteria in a system database 409 (*comparing the "score" with a "threshold"*) to provide a "System Filter". The system filtering function identifies those programs which of potential relevance to one or more of the established subject matter categories offered to subscribers. Accordingly, the system filter database 409 may take the form of a set of words (descriptors) of known relevance associated with each of the subject matter categories in the catalog (*collaborative prediction based on recipient's interest*). The comparison function at 407 scans the words in each candidate program segments to form a weighting value indicating the frequency (density) of the occurrence of descriptors for each category. Program segments whose content produces a high weighting value with respect to any category are automatically associated with that category and retained for further processing as indicated at 408, while program segments producing no weighting values greater than a predetermined minimum may be completely discarded at this stage, as indicated at 411, since their content does not indicate a sufficient likelihood of being of interest to a sufficient number of subscribers (*choosing whether to distribute the content element to the individual recipient in response to the comparing*) (Col. 35, lines 14 plus, and Col. 44, lines 40 plus).

Regarding claims 72-78, they are method claims corresponding to the system claims above.

Regarding claims 86-92, the claims recited a computer program product for performing the same basis of steps and apparatus of the prior arts as discussed in the rejection of system claims above.

C. Claims 1, 24, 27, 29, 36, 54, 72, 79, 86 is rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed method and system fail to indicate any interaction between elements (the content, score, pool, predicted interest...) as to how the interest thresholds are determined and selected. It is not clear what the “*selected threshold*” process is or what is involved in determining a “*selected threshold*” in the distributing personalized content.

D. Claims 43, 44, 61, 62, 77, 84, 91 is rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims fail to indicate any interaction between elements (the content, score, pool, predicted interest...) as to how the interest thresholds are determined and selected. It is not clear what the “selects responsive” (claim 43), and “selected condition” (claim 44) processes are or what is involved, related in determining a “*selected threshold*” in the distributing personalized content.

(11) Response to Argument

A. Response to appellant's argument: 35 USC 103(a) claim 1 (page 5),

Chaddha (US#6,345,293) in view of Reed et al. (US#6,041,239): Appellant argues the propriety of the examiner's rejections under 35 USC 103, by taking the position that the emphasis of the invention is for "deciding whether to distribute a content element based on a comparison between a threshold and a score that reflects the predicted interest of individual recipient in the content element" (Page 5, second paragraph). However, Chaddha (US#6,345,293) and Reed et al. (US#6,041,239) are applied herein merely for the teaching of a distributed information system for facilitating communications between a network distribution device and a large number of recipients, according to the essential features of the claims. Chaddha (US#6,345,293) discloses a distribution of customized multimedia content over a network, enabling personalized multimedia content targeted at specific end users. Chaddha teaches techniques for efficiently distributing marketing information over a computer network to consumers with diverse interest, while efficiently utilizing the network resources thereby providing consumers with information that is of interest to the individual consumer in a cost effective manner (*choosing whether to distribute the content element to the individual recipient based on individual's interest*) (See Figs. 2-4; Col. 7, lines 10 plus and the abstract). Reed further teaches a method and system for calculating and distributing an offered load over a wireless communications system service area for the purpose of facilitating base station layout in the service area. Fig. 6 depicted a logic flowchart that illustrates the method of calculating and locating an offered load according to the method and system

of the present invention, in which a road density factor for each tile in the service area (*score for the content element in a pool*) is calculated using the transportation database, as illustrated at block 208. The load that will be offered to a wireless communication system over a defined service area is predicted using a set of demographic and transportation route databases, along with a user selectable set of input parameters, some of which may be referred to as market factors or road density factors. These databases may be commercially available or assembled by the users. The user selectable input parameters are used to estimate the load offered by each region in the service area and distribute this load appropriately throughout the service area (*the process of choosing whether to distribute the content element to the individual recipient based on individual's predicted interest*) (See Fig. 6; Col. 2, lines 33 plus and Col. 8, lines 35 plus).

B. Response to appellant's argument on the claim limitations compared to the cited prior arts: With respect to the appellant's argument for the term "*deciding whether to distribute items (e.g., content elements) for which scores are determined*" (page 5, last paragraph). It appears that appellant is attempting to impose a rather definition in relationship to the distributed information used to collect and correlate recipient's information and preferences. The Examiner emphasizes for the record that the claims employ a broader in scope than the Applicant's disclosure in all aspects. In addition, the Applicant has not argued any narrower interpretation of the claim limitations, nor amended the claims significantly enough to construe a narrower meaning to the limitations. Since the claims breadth allows multiple interpretations and

meanings, which are broader than Applicant's disclosure, the Examiner is required to interpret the claim limitations in terms of their broadest reasonable interpretations while determining patentability of the disclosed invention. See MPEP 2111. In other words, the claims must be given their broadest reasonable interpretation consistent with the specification and the interpretation that those skilled in the art would reach. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000), *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and *In re American Academy of Science Tech Center*, 2004 WL 1067528 (Fed. Cir. May 13, 2004). Any term that is not clearly defined in the specification must be given its plain meaning as understood by one of ordinary skill in the art. See MPEP 2111.01. See also *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003), *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003). The interpretation of the claims by their broadest reasonable interpretation reduces the possibility that, once the claims are issued, the claims are interpreted more broadly than justified. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). Also, limitations appearing in the specification but not recited in the claim are not read into the claim. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the failure to significantly narrow definition or scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims in parallel to the Applicant in the response and reiterates the need for the Applicant to distinctly define the claimed invention.

C. Response to appellant's argument: 35 USC 103(a) claim 72 (page 6),

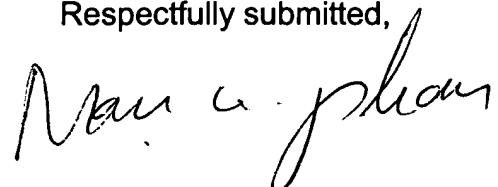
Chaddha (US#6,345,293) in view of Reed et al. (US#6,041,239) and further in view of Logan et al. (US#5,721,827): Appellant appears to be relying to the limitation "*the 'score' relates to the predicted interest of an individual recipient*" (Appeal Brief - Page 6, third paragraph) compared to Logan et al. '827. However, Logan et al. (US#5,721,827) is applied herein merely for the teaching of a personalized information delivery system which provides information and entertainment programming to individual subscribers from a library consisting of a large number of diverse programs, and which incorporates mechanisms for selectively delivering a subset of those programs to a given subscriber based on that subscriber's characteristics, subject matter preferences and interests, and express requests (*library of programs that is depended on the recipient's predicted interest*). As contemplated by the invention, the library of programs is created and maintained by a server subsystem to which a remotely located subscriber/player subsystem can connect by means of a conventional data transmission link, such as a dial up Internet connection. The programs making up the library are subdivided into program segments (*plurality of content elements*), one of which contains an audio presentation of the content of the program and, if that content includes a voice narrative, it is preferably accompanied by a text file transcript. Each program segment is associated with a subject category description (*determining a score for more than one of several different content elements in a pool of content elements*) which typically describes a plurality of related program segments, and a program topic description describes the content of each individual program segment. Combinations of these category and program descriptions which are of interest to a particular subscriber

are transferred from the server subsystem to that subscriber's player subsystem, thereby providing a subject matter *catalog* (*selecting one of the plurality of content elements in response to the "score" which varies with the recipient's interest*) from which the subscriber may expressly request particular programs (Fig. 6 and Col. 1, lines 39 plus). Logan further teaches in Fig. 6 a flow chart which describes a preferred procedure for preparing the program content which is distributed to subscribers in accordance with the invention to facilitate interactive program selection. The first step in program production is to build a structured database of `articles` which are candidates for inclusion in individual subscriber compilations (*program that is depended on the recipient's predicted interest*). The authoring system seen in Fig. 6 scans a wide range of data sources 401 for potential content as indicated at 403. Examples of data sources might be news service wire feeds or newsgroups on the Internet. The authoring system subdivides the accessed program data into program segments (topics) and indexes each segment by subject area at 405. In the case of text data, this indexing may be done automatically by parsing the text into words and building a conventional inverted file word index to the program segments. In the case of audio programming, a text transcript may be prepared using conventional speech recognition mechanisms to for a transcript, and the transcript may then be indexed by the terms used. Alternatively, human indexers may produce descriptive words and phrases to characterize the content of a program segment, and these descriptors may be used to index those segments (*determining a "score" for more than one of several different content elements in a pool*). After the indexing has been performed at 405, the authoring system then compares the each program segment's index data at 407 with system wide selection

criteria in a system database 409 (*comparing the "score" with a "threshold"*) to provide a "System Filter". The system filtering function identifies those programs which of potential relevance to one or more of the established subject matter categories offered to subscribers. Accordingly, the system filter database 409 may take the form of a set of words (descriptors) of known relevance associated with each of the subject matter categories in the catalog (*collaborative prediction based on recipient's interest*). The comparison function at 407 scans the words in each candidate program segments to form a weighting value indicating the frequency (density) of the occurrence of descriptors for each category. Program segments whose content produces a high weighting value with respect to any category are automatically associated with that category and retained for further processing as indicated at 408, while program segments producing no weighting values greater than a predetermined minimum may be completely discarded at this stage, as indicated at 411, since their content does not indicate a sufficient likelihood of being of interest to a sufficient number of subscribers (*choosing whether to distribute the content element to the individual recipient in response to the comparing*) (Col. 35, lines 14 plus, and Col. 44, lines 40 plus).

D. Conclusion: For the above reasons, it is believed that the rejections of the claims 1-3, 6-9, 12-15 and 18-92 should be sustained.

Respectfully submitted,



MAN U. PHAN
PRIMARY EXAMINER